Fredericksburg, VA Chesapeake Bay TMDL Public Meeting Summary

December 17, 2009

Wingate Inn
20 Sandford Drive
Fredericksburg, VA 22406

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Agenda

- **Welcome, introductions, and meeting logistics – Russ Perkinson, VADCR (5 minutes)**
- **EPA presentation on the Chesapeake Bay TMDL and EPA expectations – Richard Batiuk and Bob Koroncai, EPA (40 minutes)**
- **Next steps – Al Pollock, VADEQ (15 minutes)**
- **Public comments, questions and answers – Panel moderated by Russ Perkinson (60 minutes)**
- **Adjourn**

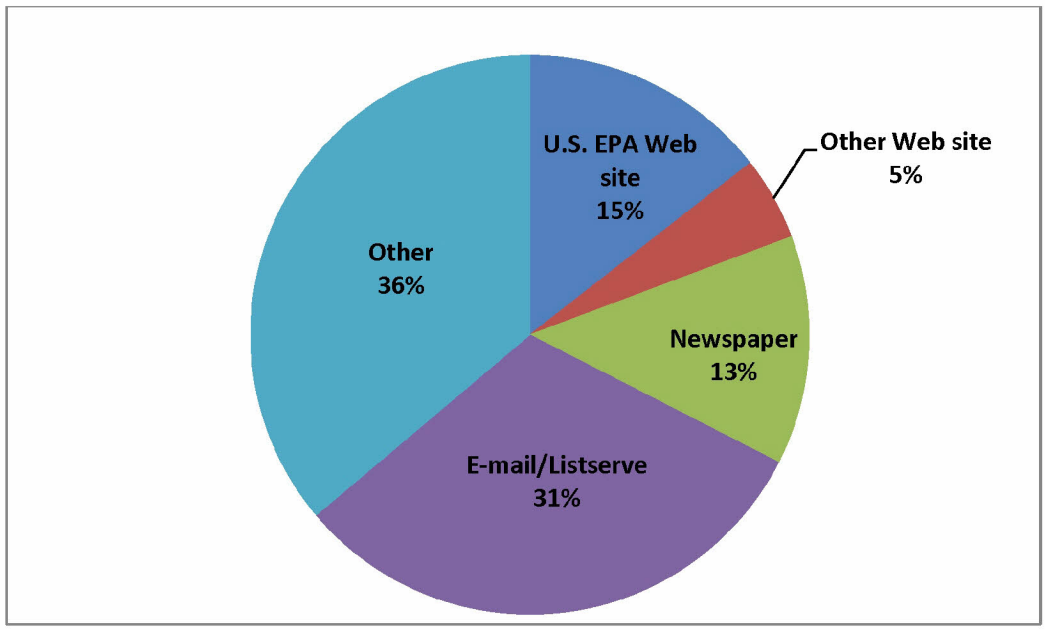
Attendee Detail

Total Live Attendees: 105

Registration Question:

How did you hear about this Meeting?

- Other (30)
  - Farm Bureau (10)
  - Word of Mouth (3)
  - DCR
  - Friends of Stafford Creek
  - Letters
  - S.S.
  - VAMWA
- E-mail/Listserve (26)
- U. S. EPA Web Site (12)
- Newspaper (11)
- Other Web Site _____ (4)
  - Ascevirginia.org

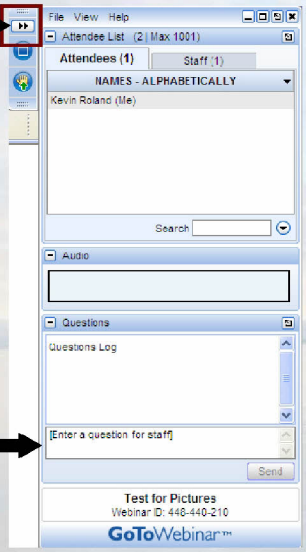


THE CHESAPEAKE BAY TMDL: Restoring Waters of Virginia and the Chesapeake Bay

Bay TMDL Public Meeting
December 16, 2009
Harrisonburg, VA

Richard Batiuk and Bob Koroncai
U.S. EPA Region III

- Click the double arrow to show or hide your control panel



- Type your questions here.
  (Indicate organization)

Note: Because of the large audience, not all questions will be answered, but they will be saved, and your questions will help drive future events and could contribute to a FAQ.

Technical Issues?

Contact:

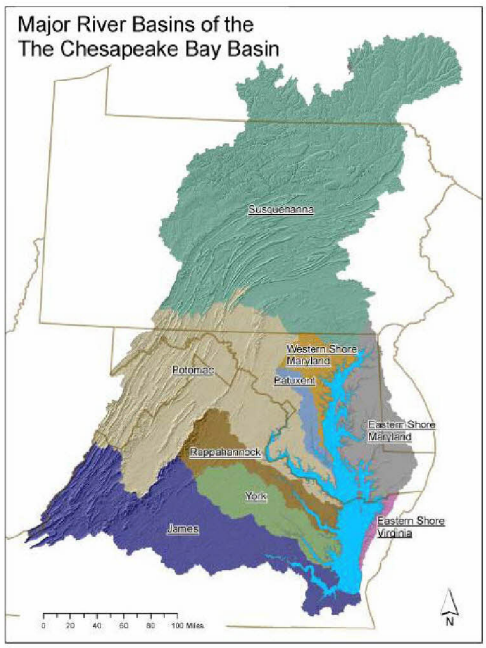
- Citrix Global Customer Support
  1-800-263-6317

AGENDA

- Welcome, introductions, and meeting logistics – **Russ Perkinson, VADCR (5 minutes)**
- EPA presentation on the Chesapeake Bay TMDL and EPA expectations – **Richard Batiuk and Bob Koroncai, EPA (40 minutes)**
- Next Steps – **Al Pollock, VADEQ (15 minutes)**
- Public comments, questions and answers – **Panel moderated by Russ Perkinson (60 minutes)**
- Adjourn

Panel to Address Public Comments

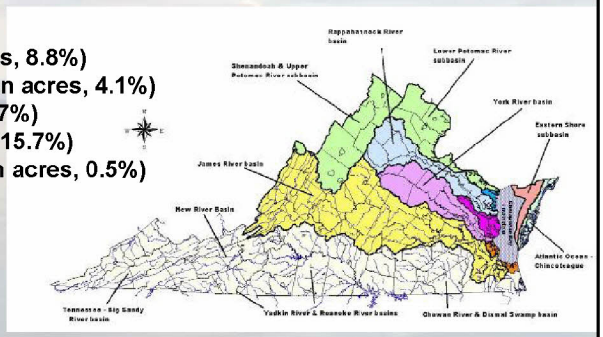
- VA Department of Conservation and Recreation: Russ Perkinson, Moderator
- EPA: Richard Batiuk
- EPA: Bob Koroncai
- VA Department of Environmental Quality: Al Pollock

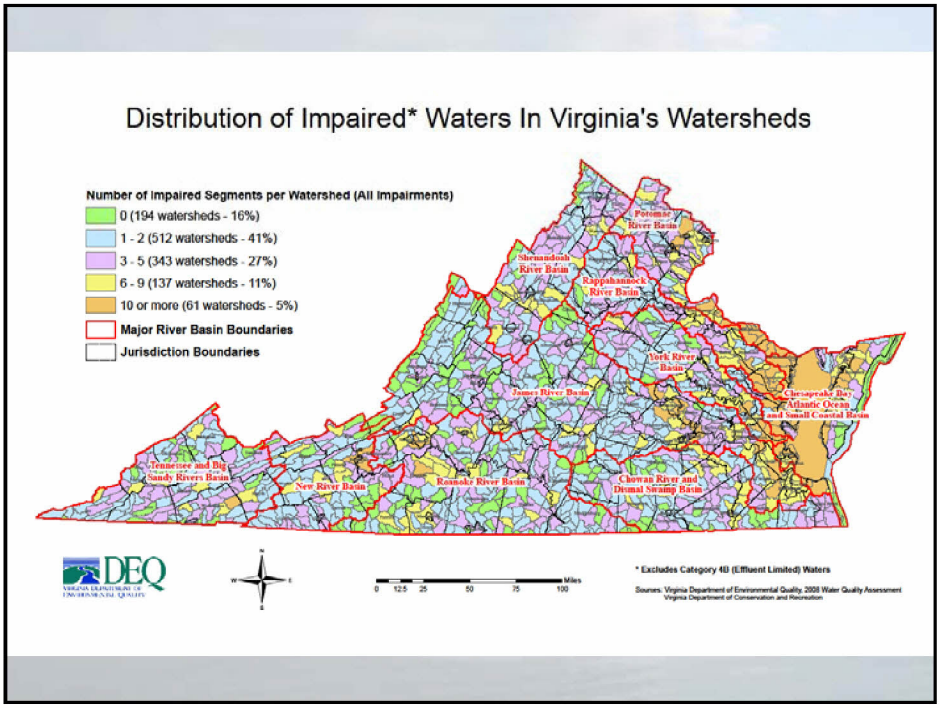


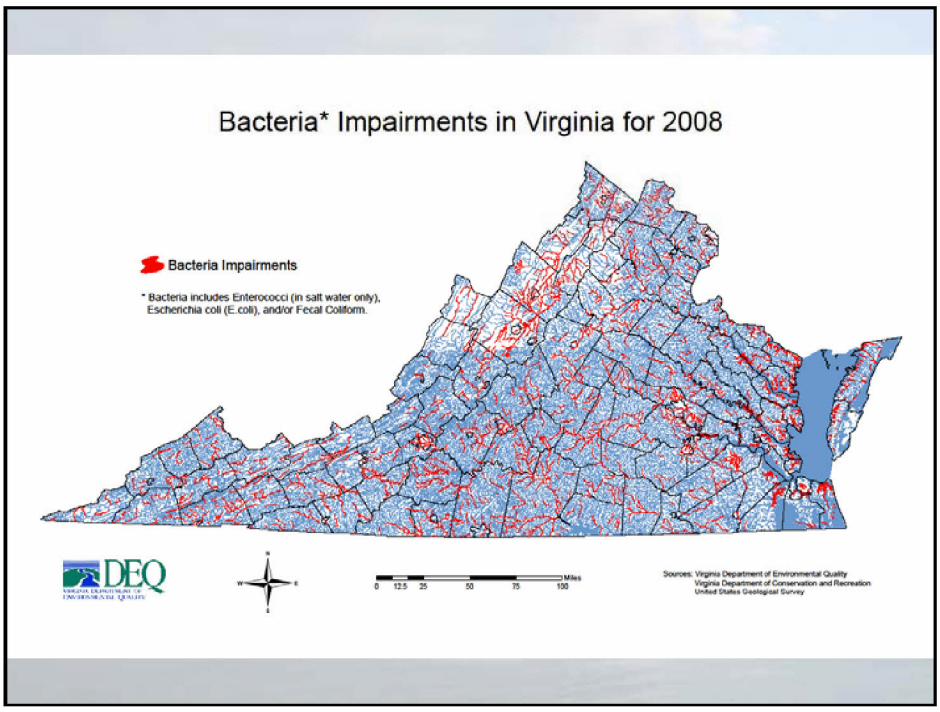
Local Water Quality Issues

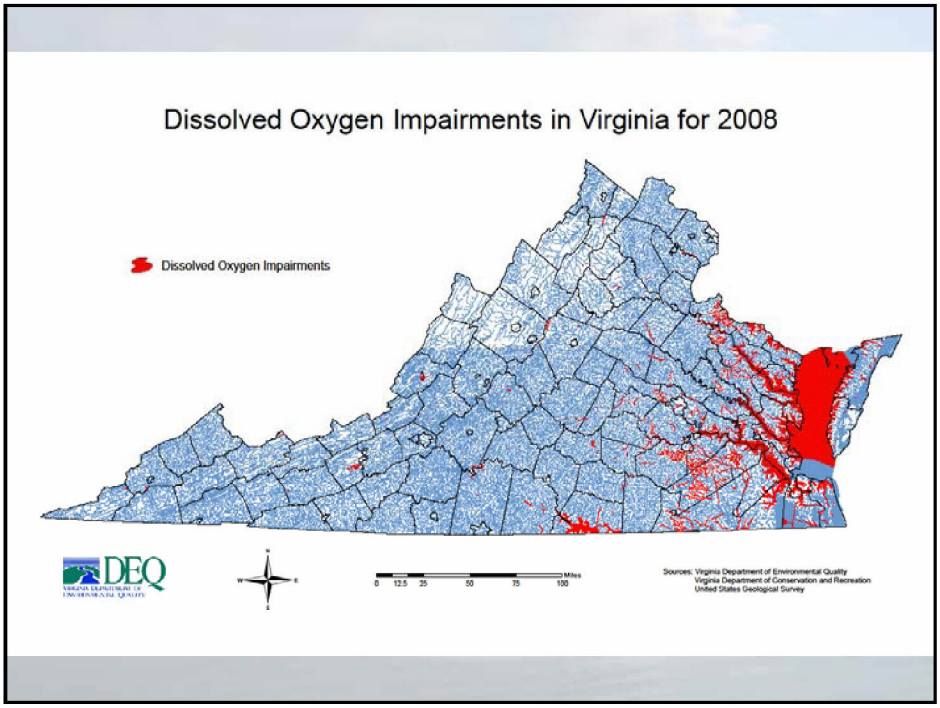
Virginia's Chesapeake Bay Watershed River Basins

- About 34% of the Bay watershed is within Virginia - over 13.8 million acres
- Over 50% of Virginia drains to the Bay
- Five VA River Basins:
  - Potomac (3.6 million acres, 8.8%)
  - Rappahannock (1.7 million acres, 4.1%)
  - York (1.9 million acres, 4.7%)
  - James (6.4 million acres, 15.7%)
  - Eastern Shore (0.2 million acres, 0.5%)
- Virginia Land Uses
  - Agriculture – 22%
  - Urban – 12 %
  - Forest – 66%



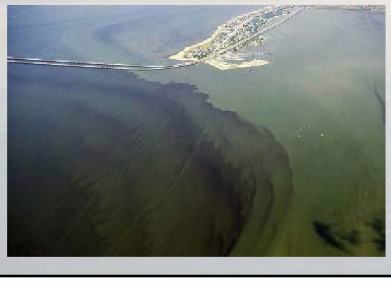

Distribution of Impaired* Waters In Virginia's Watersheds
Number of Impaired Segments per Watershed (All Impairments)
0 (194 watersheds - 16%)
1 - 2 (512 watersheds - 41%)
3 - 5 (343 watersheds - 27%)
6 - 9 (137 watersheds - 11%)
10 or more (61 watersheds - 5%)
Major River Basin Boundaries
Jurisdiction Boundaries
Potomac River Basin
Shenandoah River Basin
Rappahannock River Basin
York River Basin
James River Basin
Chesapeake Bay, Atlantic Ocean and Small Coastal Basin
Tennessee and Big Sandy Rivers Basin
New River Basin
Roanoke River Basin
Chowan River and Dismal Swamp Basin
DEQ
0 12.5 25 50 75 100 Miles
* Excludes Category 4B (Effluent Limited) Waters
Sources: Virginia Department of Environmental Quality 2008 Water Quality Assessment
Virginia Department of Conservation and Recreation

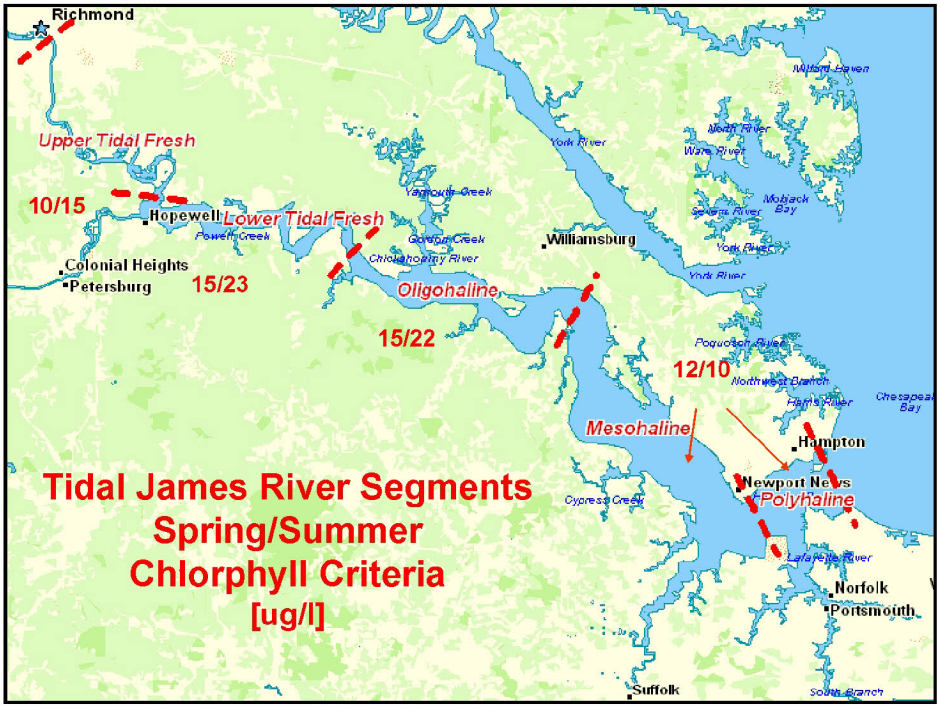

Bacteria* Impairments in Virginia for 2008
Bacteria Impairments
* Bacteria includes Enterococci (in salt water only), Escherichia coli (E.coli), and/or Fecal Coliform.
DEQ
0 12.5 25 50 75 100 Miles
Sources: Virginia Department of Environmental Quality
Virginia Department of Conservation and Recreation
United States Geological Survey



Special Case: James River

- The dissolved oxygen standards in the Bay and its tidal rivers are the basis for the working nutrient target loads being used to develop Watershed Implementation Plans in each Virginia river basin.
- However, the target loads in the James basin do not yet account for what will be needed to also meet the chlorophyll standards, which were adopted due to high algae levels in the tidal James River.




Richmond
Upper Tidal Fresh
10/15
Hopewell
Lower Tidal Fresh
Colonial Heights
Petersburg
15/23
Oligohaline
15/22
Williamsburg
12/10
Mesohaline
Hampton
Newport News
Polyhaline
Norfolk
Portsmouth
Suffolk
Tidal James River Segments
Spring/Summer
Chlorphyll Criteria
[ug/l]

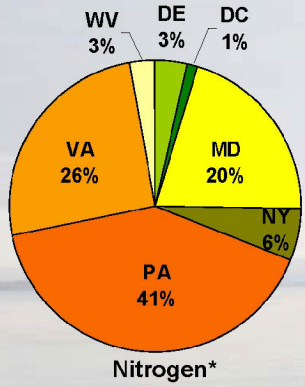

Chesapeake Bay
Water Quality Issues

Chesapeake Bay Watershed-
By the Numbers

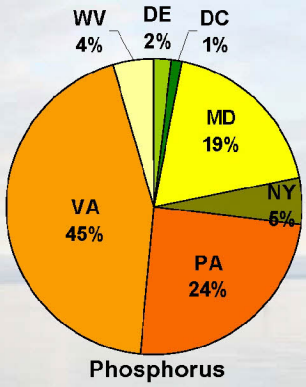
- Largest U.S. estuary
- Six-states and DC, 64,000 square mile watershed
- 10,000 miles of shoreline (longer then entire U.S. west coast)
- Over 3,600 species of plants, fish and other animals
- Average depth: 21 feet
- $750 million contribution annually to local economies
- Home to 17 million people (and counting)
- 77,000 principally family farms
- Declared "national treasure" by President Obama

Source: www.chesapeakebay.net

Nutrient Loads by State



Nitrogen*

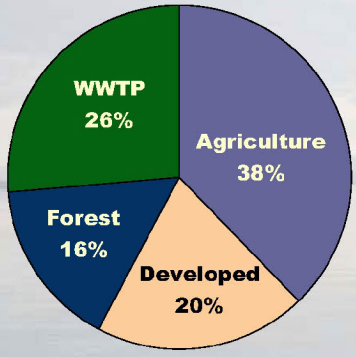


Phosphorus

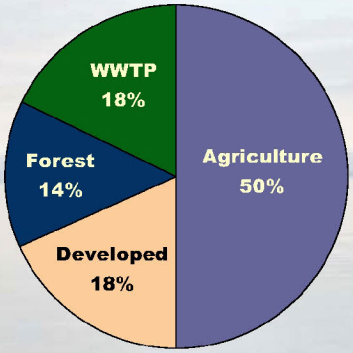
*EPA estimates a nitrogen load of 284 million lbs nitrogen in 2008. EPA assumes a reduction of 7 million lbs due to the Clean Air Act. This leaves 77 millions lbs to be addressed through the TMDL process.

Nutrient Sources of VA

Sources of Nitrogen from Virginia

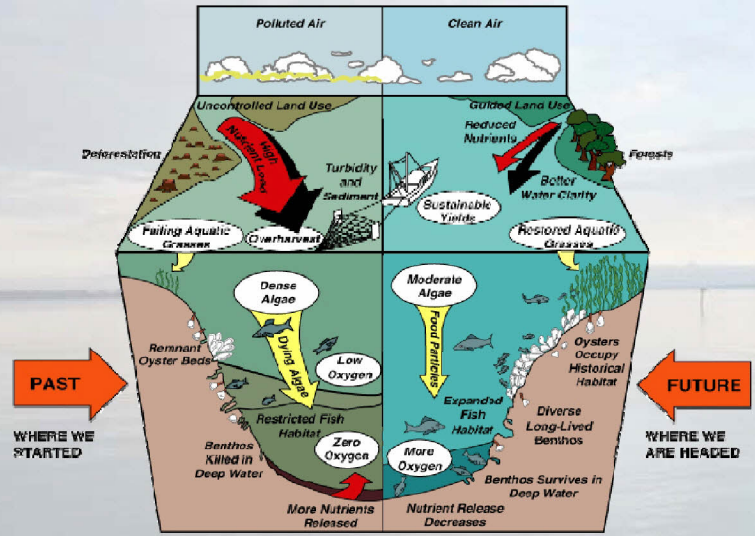


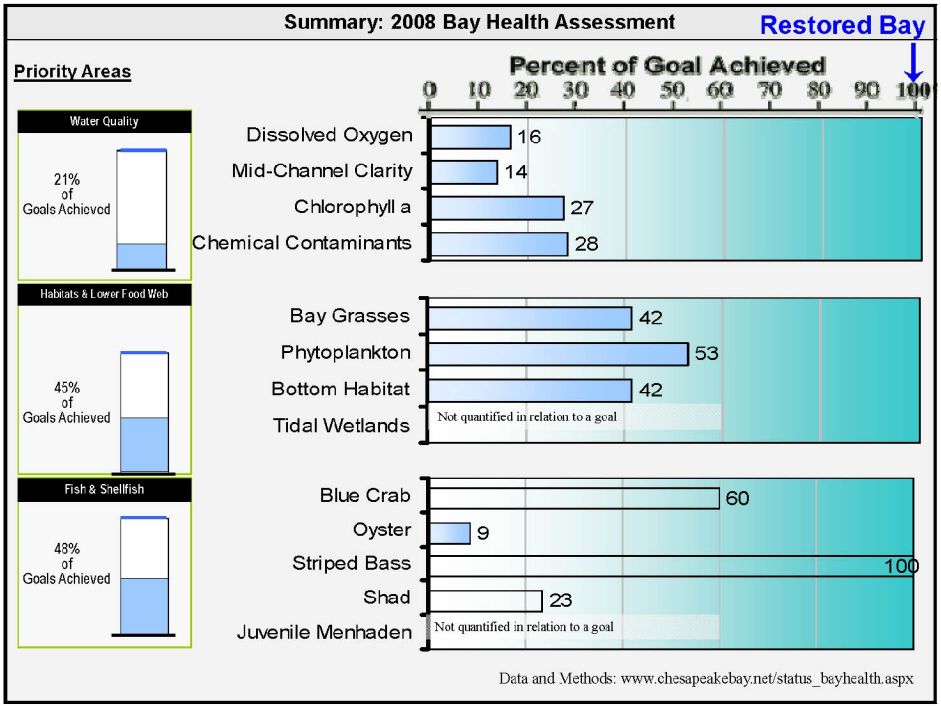
Sources of Phosphorus from Virginia

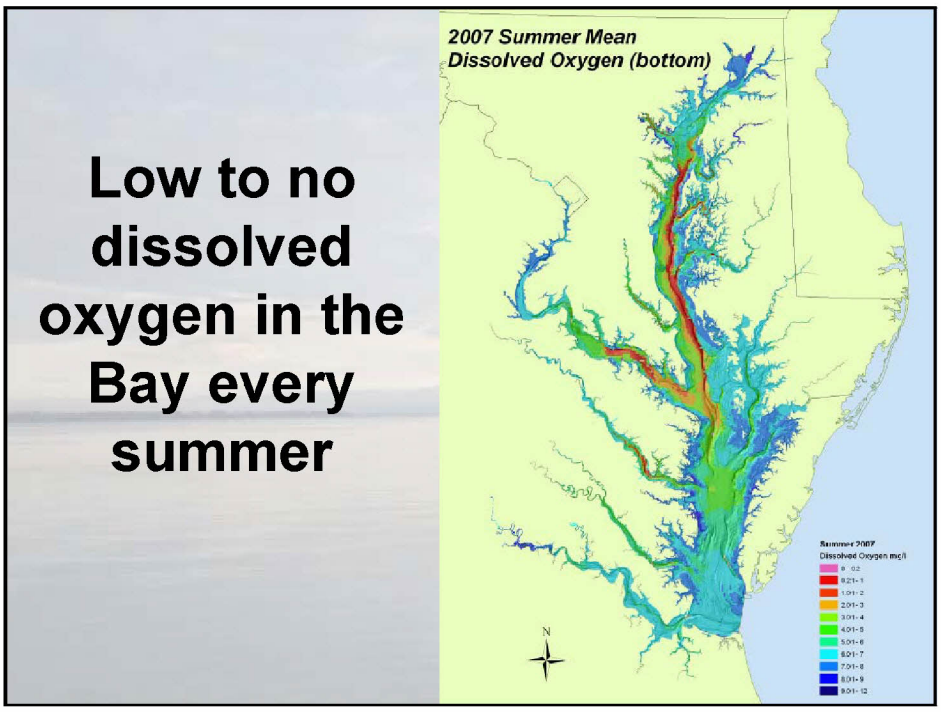


N and P values from 2008 Scenario of Phase 5.2 Watershed Model

Chesapeake Bay Health- Past and Future

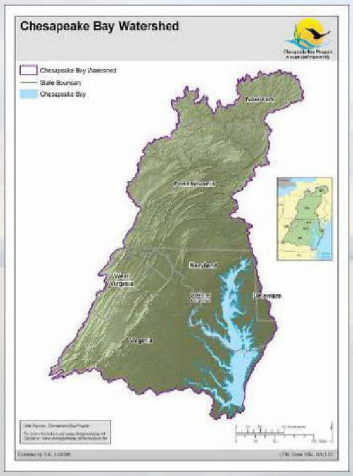



Summary: 2008 Bay Health Assessment
Restored Bay
Priority Areas
Percent of Goal Achieved
0 10 20 30 40 50 60 70 80 90 100
Water Quality
21% of Goals Achieved
Dissolved Oxygen 16
Mid-Channel Clarity 14
Chlorophyll a 27
Chemical Contaminants 28
Habitats & Lower Food Web
45% of Goals Achieved
Bay Grasses 42
Phytoplankton 53
Bottom Habitat 42
Tidal Wetlands
Not quantified in relation to a goal
Fish & Shellfish
48% of Goals Achieved
Blue Crab 60
Oyster 9
Striped Bass 100
Shad 23
Juvenile Menhaden
Not quantified in relation to a goal
Data and Methods: www.chesapeakebay.net/status_bayhealth.aspx

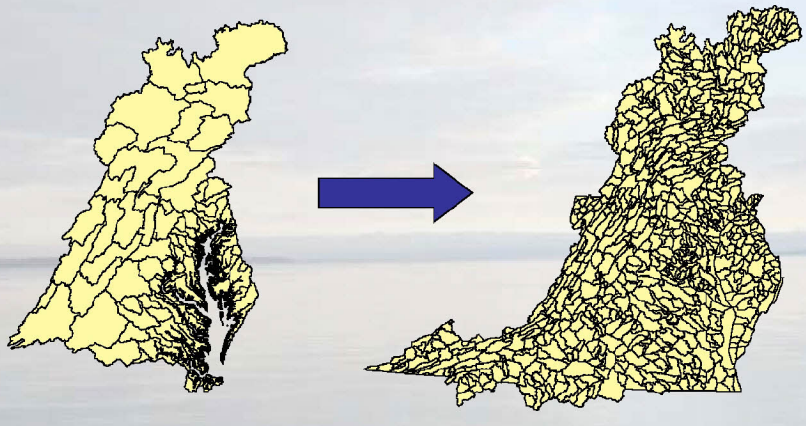

Low to no dissolved oxygen in the Bay every summer
2007 Summer Mean
Dissolved Oxygen (bottom)
N

The Chesapeake Bay TMDL

- EPA sets pollution diet to meet states' Bay clean water standards
- Caps on nitrogen, phosphorus and sediment loads for all 6 Bay watershed states and DC
- States set load caps for point and non-point sources



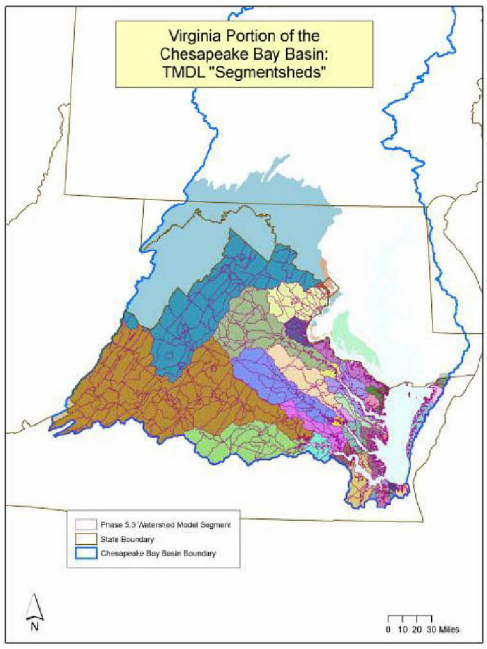
The Bay science supports local pollution diets…



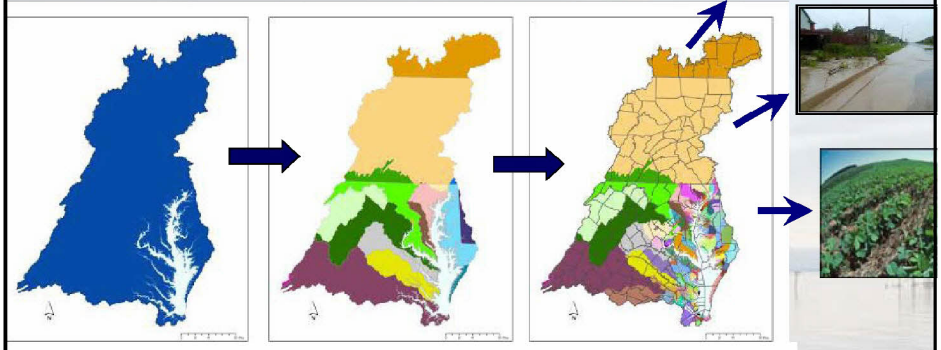
Phase 4 Bay Watershed Model
(2000-2008)

Phase 5 Bay Watershed Model
(2009-)

…with detailed representation of VA's local watersheds



Taking Responsibility for Load Reductions



Identify basinwide target loads	Identify major basin by jurisdiction target loads	Identify tidal segment watershed, county and source sector target loads
EPA, States, DC	EPA, States, DC	States, DC, local governments & local partners

What are the Target Pollutant Cap Loads for the Bay Watershed?

Current model estimates are that the states' Bay water quality standards can be met at basinwide loading levels of:

- 200 million pounds nitrogen per year
- 15 million pounds phosphorus per year

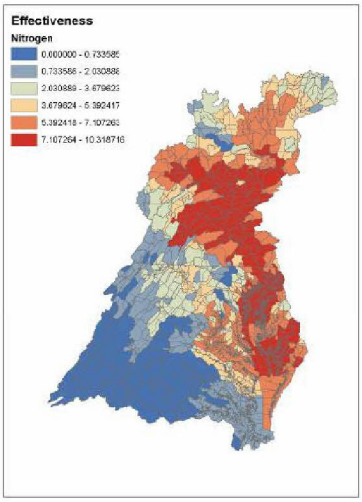
(Sediment target cap load under development-will be available by spring 2010)

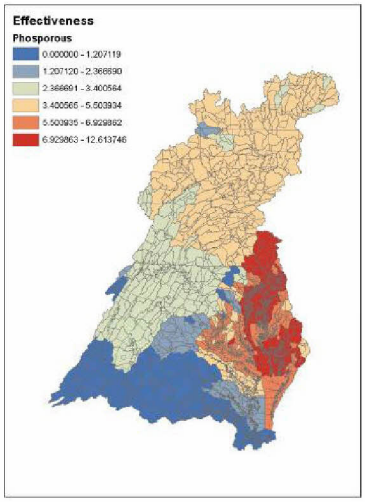
Dividing the Basinwide Target Loading

Guidelines for Distributing the Basinwide Target Loads

- Water quality and living resource goals should be achieved.
- Waters that contribute the most to the problem should achieve the most reductions (on a per pound basis).
- All previous reductions in nutrient loads are credited toward achieving final cap loads.

Nutrient Impacts on Bay WQ





Current State Target Loads

Nitrogen

State	Tributary Strategy	Target Load
DC	2.12	2.37
DE	6.43	5.25
MD	42.37	41.04
NY	8.68	10.54
PA	73.48	73.64
VA	56.75	59.21
WV	5.93	5.71
Total	195.75	197.76

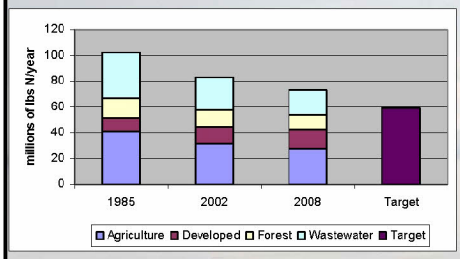
Phosphorus

State	Tributary Strategy	Target Load
DC	0.10	0.13
DE	0.25	0.28
MD	2.54	3.04
NY	0.56	0.56
PA	3.10	3.16
VA	6.41	7.05
WV	0.43	0.62
Total	13.39	14.84

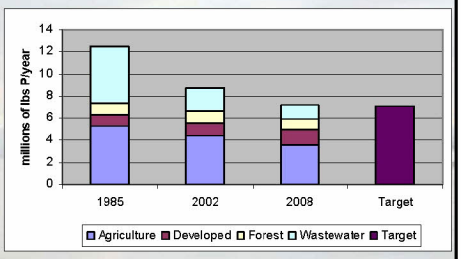
All loads are in millions of pounds per year.

Virginia's Past, Present and Future Estimated Loads

Nitrogen



Phosphorus

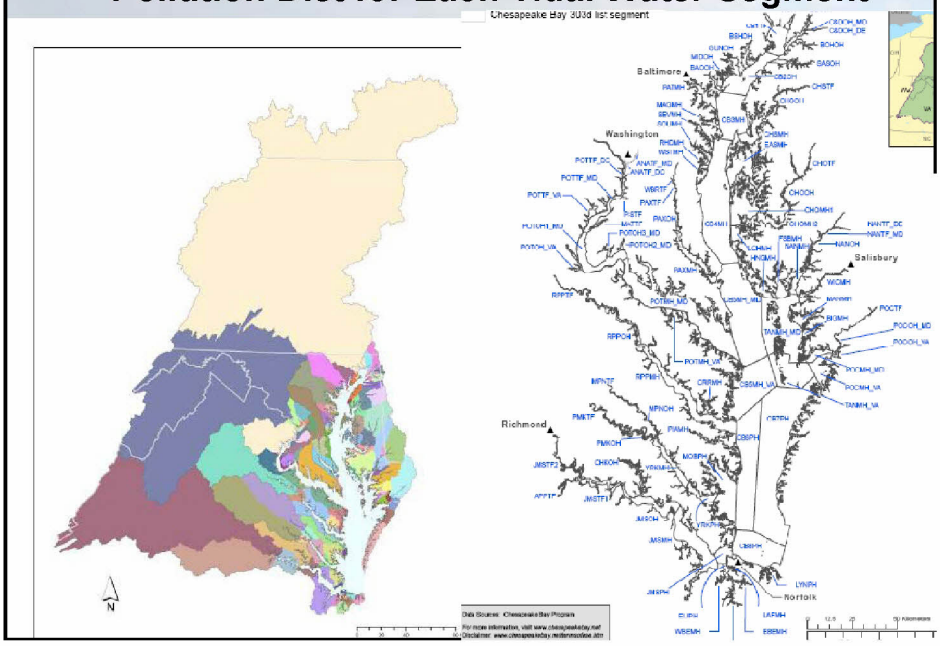


All scenarios run through Phase 5.2 Watershed Model

Target Load Refinements

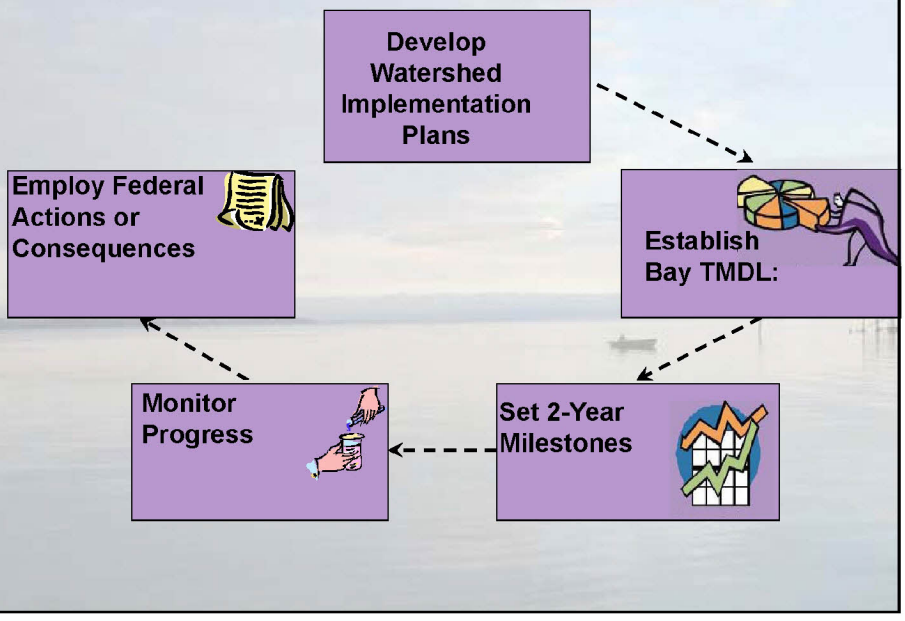
- If States' Bay Water Quality Standards can still be achieved…
  - The State may exchange nitrogen and phosphorus target loads within a basin; and/or
  - The State may exchange nitrogen and phosphorus loads from one basin to another within the State.

Pollution Diet for Each Tidal Water Segment

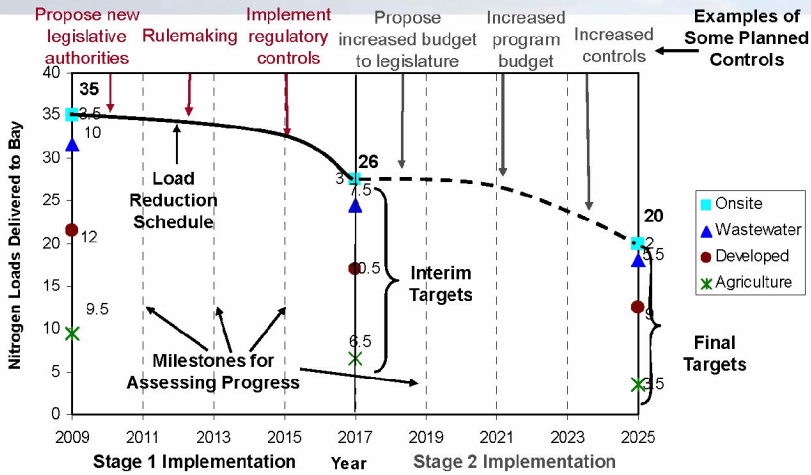


The Chesapeake Bay Performance and Accountability System

Mandatory Pollution Diet at Work



Example: Projected Nitrogen Delivery from Major Basin in Each Jurisdiction by Source Sector



- Also divide jurisdiction load by 303(d) segment drainage area and, by November 2011, local area
- Attain jurisdiction-wide load reductions by the interim target, or justify why can still meet final target
- Jurisdiction would determine desired 2-year schedule to meet interim and final target loads
- EPA first evaluates milestones based on consistency with jurisdiction target load. EPA accepts shifts among source sectors, basins, segment drainages, and local areas if jurisdiction target load is met and local and Bay water quality goals are achieved

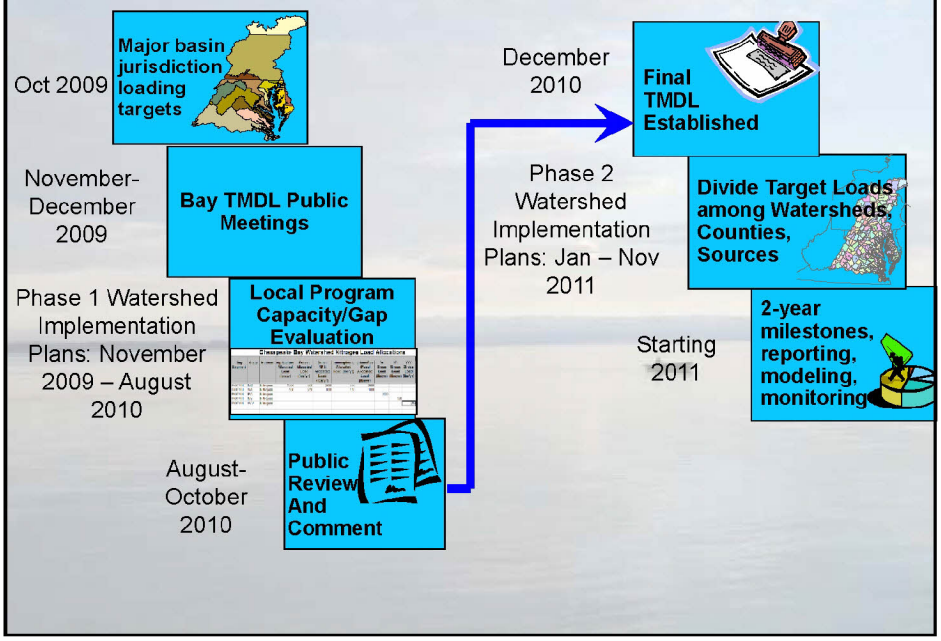
Federal Consequences

- Directed at states not achieving expectations
- Will be outlined in an EPA letter this fall. May include:
  - Assigning more stringent pollution reductions to regulated point sources (e.g., wastewater, stormwater, CAFOs)
  - Objecting to state-issued NPDES permits
  - Limiting or prohibiting new or expanded discharges (e.g., wastewater, stormwater) of nutrients and sediment
  - Withholding, conditioning or reallocating federal grant funds

Bay TMDL- Presidential Executive Order Connections

- Create Federal Leadership Committee
- Create the Performance and Accountability Framework
- Expand regulatory tools for CAFO's and urban and suburban runoff
- Improve nutrient and sediment controls on federal lands and roads
- Target farm conservation measures at high priority areas

Your Role in Bay TMDL Process



Bay TMDL: Bottom-line

- Actions will clean and protect local waters in VA thereby supporting the local economy
- Restore a thriving Chesapeake Bay
- Federal, state, local officials and agencies will be fully accountable to the public
- Consequences for inaction, lack of progress

Further Information

- Chesapeake Bay TMDL web site
  www.epa.gov/chesapeakebaytmdl
- U.S. EPA Region 3 Contacts
  - Water Protection Division
    - Bob Koroncai
      - 215-814-5730; koroncai.robert@epa.gov
    - Jennifer Sincock (sincock.jennifer@epa.gov)
  - Chesapeake Bay Program Office
    - Rich Batiuk
      - 410-267-5731; batiuk.richard@epa.gov
    - Katherine Antos (antos.katherine@epa.gov)

Virginia's Approach to Developing the Chesapeake Bay TMDL Watershed Implementation Plan

Department of Conservation and Recreation
Department of Environmental Quality
Secretary of Natural Resources
Commonwealth of Virginia

December 2009

A Challenged Bay

- Loss of shellfish and finfish
- Habitat loss
- Annual dead zones
- Poor water clarity

Successes to Date

- Much has been done using voluntary, incentive based, and regulatory programs
- 1985 Loads
  - 102 million pounds Nitrogen
  - 12.4 million pounds Phosphorus
- 2008 Estimated Loads
  - 72.8 million pounds Nitrogen
  - 7.2 million pounds Phosphorus





The Challenge Ahead

- To meet water quality standards in the Chesapeake Bay and its tidal rivers, **there is more to do**
- Low hanging fruit – mostly gone
- Future reductions will be harder
- We all have a role

What We Need to Achieve (and Maintain)

Virginia Bay Draft Initial Target Loads

- 59.2 million pounds Nitrogen
- 7.05 million pounds Phosphorus
- These targets are very likely to change

Load Uncertainties

- Initial draft target loads provided by EPA based on dissolved oxygen **only**
- Impacts on target loads from water quality standards for bay grasses, water clarity and other localized issues not yet determined
- Will be spring 2010 before target loads are adjusted for these factors

Vision for Virginia's Watershed Implementation Plan

- Focuses on "how" as well as the "how much"
- Equity between sectors
- Is relevant locally
- Uses adaptive management

Actively engage stakeholders and the public

- Virginia Bay TMDL Webinar (October 2009)
- Initial EPA Public Meetings (December 2009)
- Go to Individual stakeholder meetings (2010)
- Stakeholder Advisory Group (early 2010)
- Use Interactive web-based tools (Ongoing)
- EPA Public Comment Period (Aug. – Oct. 2010)
- Additional outreach as necessary

A Challenging Timeframe

EPA deadlines:

Phase I – Draft allocations and state strategies

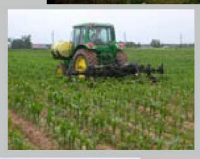
- June 1, 2010 - Preliminary phase I plan by source sector and impaired segment drainage area
- August 1, 2010 – Draft phase I plan
- November 1, 2010 – Final phase I plan

Phase II – Local target loads and action plans

- June 1, 2011 – Draft phase II plan
- November 1, 2011 – Final phase II plan submitted to EPA

Phase I – Draft Allocations by Source Sector and State Strategies

- State staff to consult with sector experts, then staff will develop projected BMP coverage levels
- Draft reviewed and refined following input by Stakeholder Group
- Used to derive potential nutrient and sediment load reductions and develop State strategies



Phase I – Draft Allocations by Source Sector and State Strategies

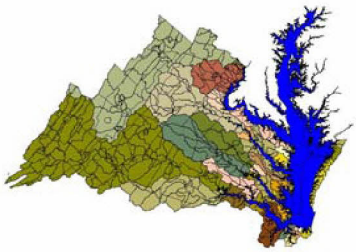
Source Sectors

- Municipal and Industrial Wastewater
- Non-Significant Wastewater
- Municipal Combined Sewer Overflows [3 systems in VA]
- Industrial Stormwater
- Construction Stormwater
- MS4 Stormwater
- Non-MS4 Stormwater
- Confined Animal Feeding Operations (CAFOs)
- Agriculture – non CAFO
- Forest
- Atmospheric
- Onsite / septic systems

Phase I – Draft Allocations Made to Individual Watershed Segments

- State agency staff will distribute the allowable loads into the various impaired segments and among the various sources
- Land use data (cropland, developed land, etc.) along with BMP coverage projections and resulting load reductions will be used
- Draft reviewed and refined following input by Stakeholder Group

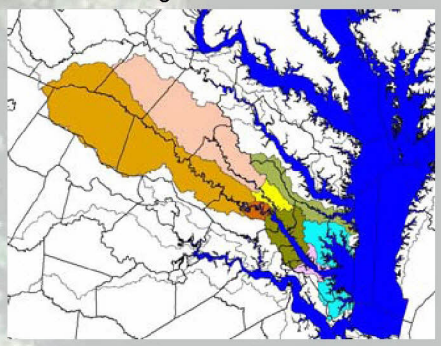
Virginia's 35 Bay Watershed Segments



Phase II - Local Target Loads and Action Plans

- Will work closely with local stakeholders to identify specific controls and practices to be implemented
- Agencies will initiate work later in 2010
- Due by November 2011

York River Segments and Jurisdictions



2-Year Milestone Process

- Biennial Milestones –Use adaptive management; identify specific actions needed to maintain schedule
- Continue to engage stakeholders and public
- Monitor and evaluate progress
- Next milestone period – January 1, 2012 to December 31, 2013 to be completed with phase II plan

Want to find out more?

EPA

http://www.epa.gov/chesapeakebaytmdl/

VA-DEQ

http://www.deq.virginia.gov/tmdl/chesapeakebay.html

VA-DCR

http://www.dcr.virginia.gov/soil_and_water/baytmdl.shtml

Further Information

- **Chesapeake Bay TMDL web site**
  www.epa.gov/chesapeakebaytmdl
- **U.S. EPA Region 3 Contacts**
  - **Water Protection Division**
    - **Bob Koroncai**
      - **215-814-5730; koroncai.robert@epa.gov**
    - **Jennifer Sincock (sincock.jennifer@epa.gov)**
  - **Chesapeake Bay Program Office**
    - **Rich Batiuk**
      - **410-267-5731; batiuk.richard@epa.gov**
    - **Katherine Antos (antos.katherine@epa.gov)**

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Questions & Comments


Thank you for your participation.
THANK YOU
That concludes today's meeting.

Questions Answered

Questions Answered (in the order in which they were asked):

Note: The letter indicates the source of each question. An "A" indicates that the question was submitted by the live audience. The cards were pre-numbered to easily identify the question once they were submitted. These questions are in the order in which they were asked. Some questions were rewritten for clarity.

A1: Has the science and model assumption used been truth tested, actually on the ground tested? If not, why not?

A2: For 20 years we have heard that agriculture contributes 50% of the nutrient load to the bay. During those 20 years, countless BMPs have become common practice on Virginia farms. How can production agriculture still be contributing 50%? How and where is this load being measured?

A19: Why is it that Virginia, the major stakeholder and neighbor of the Bay, has been the major tail dragger and obfuscator concerning Bay cleanup? Pennsylvania and New York have done far more to recognize and mitigate pollution.

A4: What stakeholders were involved in establishing the nutrient and sediment limits? Were there any agriculture representatives involved? How are TMDLs being developed?

A5: How will the $1.51 billion to assist local governments for reducing stormwater pollution be allocated and used? (Charles Sydnor)

A22: Lots of plans, regulations, and strategies have been developed recently for the protection and restoration of the Bay. What economic impact or analysis has been conducted and, more importantly, where are the resources (funds, manpower, etc.) coming from to support these efforts?

A10b: Why doesn't the Bay model capture more of the voluntary BMPs on farms? (Bill Latane)

A25: On the progress of reducing nitrogen toward the target, the "developed" source appears to be the only usage that is growing instead of lessening. Assuming this is non-wastewater treatment development, how will individual property owners and non-regulated development usage (i.e. golf courses) be monitored and regulated?

A24: What is a "living resource" goal?

A7: How will the load from every bag of Scotts Turf Builder sold at Lowes and Home Depot not penalize Virginia agriculture and watermen?

A12: In previous meetings, representatives from VDEQ, NRCS, and DCR have all confessed that much of the data that they use to determine nutrient and sediment sources are estimates at best. They claim to not have the resources to obtain better data. How can we possibly develop an effective plan to clean up the Bay when we are only guessing at actual nutrient sources? Why are we rushing to develop a

management plan without first developing better data so that an effective plan can be developed? (Jim Miller, Orange County Farm Bureau)

A17: How can we "cap" nutrient/pollutant sources from out of state sources, i.e. power plants?

A14: Estimates are that the Chesapeake Bay water level is dropping at a rate of one foot per ten years, exposing rich soil to run off into the Bay, allowing sunlight to reach farther into what was previously the "depths" of the Bay, etc. How is the drop in water level factored into the health and degradation of the Bay? (George Goodwin)

A13: Will this mean soil samples will be useless, that farmers will be told what they can use even if it is not sufficient for maximum production of the land?

A17: How often will the TMDLs be evaluated for an individual watershed? Is there a research component to this regulation to see if what is implemented works? How is this enforced, through inspection? Is there an offset component to this? If somebody fixes an old problem, can it count towards a credit to a new load source? The DCR guideline on stormwater runoff for developed land is 0.45 pounds per year of phosphorus. Is it possible that a TMDL could have a phosphorus load limit higher than 0.45 pounds per year of phosphorus? If so, will DCR consider that?

A32: How was it determined that the challenges affecting the Bay are not naturally occurring? For example – we have been "polluting" the Bay since the 1600's, and on a large scale. Can we do a before/after on the TMDL loading on the Bay?

A27: "Agriculture" is depicted as a major contributor to nitrogen and to greater extent phosphorus in the Bay. Yet, all farms are not equal contributors. How does the agricultural contribution breakdown by the type and density of the operations? For example, there are an increasing number of sod farms and the nature of the operation requires a large amount of water for irrigation. The nitrogen and phosphorus has almost no setback gone to pass through to reach the water source. This is a totally different agricultural operation than a low density cattle operation.

Questions Submitted

Questions Submitted (but not answered):

A14: Why do you want to bankrupt production agriculture with your potential TMDLs and make production responsible for all of the problems facing the Bay? (Ted Haberland, Farmer in Orange and Madison Counties, Virginia)

A10a: Agriculture and forestry have decreased their nutrient contributions to the Bay. Urban and suburban contributions have increased or at best held their own. With populations increasing, how can we reduce nonpoint, non-agricultural nutrients? (Bill Latane)

A34: Given that profitable agricultural production is second only to forest land to protect the Bay, how could we possibly be proposing TMDLs that will affect agriculture with little to no direct contact with the vast number of broad thinking innovative producers? Communication responsibility is a two way challenge. Mr. Koroncai related that home builders, municipal representatives were involved! (Dan Brann)

A111: What stakeholders were involved in establishing the nutrient and sediment limits? What are the consequences for failure to comply?

A112: What stakeholders were involved in establishing the nutrient and sediment limits? What are the consequences of failure to develop the TMDL? What are the consequences of failure to comply?

A11: Has anyone told the consumer/tax payer they are going to pay the bill for this in the end by higher food prices, or unsafe, imported food? As a dairy farmer, we can't afford any more expenses. Our farm milk price is just too low. Fuel, fertilizer, and feed are too expensive. (Josh Colvin, Dairy Farmer, Calverton, Maryland)

A9: Forestry operations are generally exempt for erosion and sediment control regulations in Virginia. If you are imposing stricter requirements on development and agriculture activities, are forestry operations going to be subject to the new requirements also? If not, why not? Forestry operations are a major source of sediment to rural rivers.

A18: How will wildlife populations be managed to reduce nitrates and bacteria in the Chesapeake Bay? No mention was made of waterfowl or deer population problems as contributors.

A23: Is there a relationship between the size of the dead zones and human population up stream of the dead zone? What ensures that achievement of assigned load reductions will, in fact, restore the health of state waters and the Bay?

A16: If the phosphorus TMDL is lower in Virginia than the Tributary Strategy loads according to current modeling, why has Virginia adopted more stringent phosphorus runoff rules for residential/commercial/industrial development?

A26: Partners involved with reductions in Virginia are DCR for most nonpoint source reductions and DEQ with most point source reductions. Nothing has been said about Virginia Department of Health and reductions that need to be achieved for neither septic systems nor the loading potential. How will septics be addressed?

A18: What is the baseline or initial load level time frame? (Dan Brann)

A100: Rain fall is never the same. What numbers in the models are we using to show the sources to the mouth of the Rappahannock River? (Woody Hynoun, Westmoreland County)

Comments

The comments below have been paraphrased and are not a full transcription.

A110: Remember that the highest use of nitrogen and phosphorus is residential areas (suburban) not farms. Keep the state and local agencies implementing this clean up. Keep in mind big industry runoff.

A12: For local governments, load reductions cost money and consequences for not meeting reductions cost money. The TMDL is one of many unfunded mandates placed upon local government. Similar to your rational behind apportioning the load, each jurisdiction must prioritize which of the unfunded mandates they may be able to fund, and to what level. As a result, all unfunded mandates ultimately fail.

A23: Thanks for being here and for doing all possible to actively enforce the law and put compliance ahead of shortsighted economic gain/status quo.

Jennifer Allen, Friends of the Rappahannock

I fully support the Bay TMDL process. I also encourage EPA to stay strong in this process, in fully using its regulatory and enforcement authority under the Clean Water Act. I will have full faith in the EPA's commitment to the Bay where the EPA implements consequences to any states that do not meet their 2-year milestones. I am concerned on how the states can work effectively with localities and with local citizens to achieve results.

Linda Dort, Realtor, Friends of the Rappahannock

I support the EPA's effort to create an achievable plan to bring back the Bay. It is commendable that you are holding meetings such as these, that bring together farmers, developers, environmentalists, and the general public to discuss and negotiate compromises that, when enacted, will provide a sustainable and healthy Chesapeake for our descendants. As a realtor, I have a chance to hear the concerns of many residents and prospective buyers and I would urge you to recognize that programs which encourage low impact development, walkable communities, and building with trees, all of which will help reduce sediment additions to the watershed, are what buyers today, want.

Rebecca Hanmer

My name is Rebecca Hanmer. I am a resident of Fredericksburg, Virginia, a member of the Friends of the Rappahannock, and I also would like to speak tonight to support the development of the Chesapeake TMDL by the U.S. EPA. And as you have heard, the Agency is doing this in cooperation with the states. Now the Bay science is probably the best estuary science in the world, and the decline of the Bay and its natural resources is well documented. You talk about oysters that are down to one or two percent of

their previous abundance. Everywhere we see decline. The causes are also very well understood and documented. Establishment of the TMDL allocations is based on that best Bay science, which demonstrates conclusively the overload of nutrients and the discharge of sediments that pollute the Bay and also the tidal tributaries, such as the Rappahannock. So I think the Chesapeake TMDL is targeting the right pollutants that need to be controlled in the right amounts. Before retiring in 2007, I worked at the U.S. EPA and I was the director of the Chesapeake Bay Program Office from 2002 to 2007. Why do I mention this? Well, while at the Bay Office, I worked with the EPA staff and the states to establish new water quality standards. These standards were actually easier to meet than the standards that were on the books from the old days. Those old standards were completely unachievable. So we worked very hard with our Bay science to do something to rationalize the standards to make them not only scientifically sound, but also standards that could be achieved. As you heard, we targeted dissolved oxygen, removing the dead zones in both the tidal rivers and the Bay, and also restoring underwater Bay grass, which is essential habitat. Now EPA published these criteria in 2003 after a multi-year process in which a number of stakeholders were involved, and we did an economic analysis at that time. It had to be based on theoretical state implementation plans, since we didn't have real ones. But when we did that economical and tactile analysis, we determined that the standards were attainable. In fact, we had to do that to meet our own regulations. And while there are challenges, it's not an impossible job. The states' standards were based on the EPA criteria document, and they were adopted in 2004 and 2005. So the TMDLs don't establish anything new. The TMDL is based on an allocation process to determine what is fair, equitable, and most efficient way to meet the water quality standards. So that's why I support the development of the TMDL. It is necessary. If we could have done it voluntarily, that would have been great, but we didn't. Thank you.

Kandy Hillard

I am really excited to see that the EPA is going forward with actual regulations. Having worked in a number of organizations, where water quality as an issue (Potomac Watershed Round Table, an advisor to the Chesapeake Bay, local officials, LGAC); one of the issues that has been a great concern is the inability, or any way to actually enforce the proposed regulations. I have children, no grandchildren yet, but I would very much like to take my children to spend time in the water and not worry about whether they are going to have sores. My son loves to fish, but we would not eat any of the fish we caught because sometimes when the fish are caught they have lesions on them. I do not want to wonder the seafood coming from the Chesapeake Bay is safe for consumption. I do not want to wonder if the people who are going fishing in the area where I live are going to come out with sores all over them. When the waters are so impacted that you have a major sewer spill and they do not warn the neighborhood that a sewer spill has occurred (which has happened in Aquia Harbour this summer), we have a real problem. I am thrilled that EPA is going forward with these regulations and I highly encourage them to be implemented as soon as possible. Thank you.

Josh Colvin

Has anyone told the consumer/tax payer they are going to pay the bill for this in the end by higher food prices, or unsafe imported food? As a dairy Farmer we can't afford any more expense our farm milk price is just too low. Fuel, fertilizer and feed is too expensive.

Rita Girard

I support the EPA's efforts to establish land limits for all sectors in an effort to restore the Chesapeake Bay. I believe we need to be responsible stewards of the Earth and take measures to hold all of us accountable and stop thinking of individual, short –sighted, self serving goals! Although it will cost some stakeholders more than others - initially – I believe it is the only morally responsible actions! Again, I support the EPA's efforts.

Kurt Christensen

Thank you very much; I am Kurt Christensen, a dairy farmer from the Richardson area. First of all, I would just like to ask the audience to stand if they are for giving the federal government more power to regulate water quality on your private land. I would like that record to show that about 2/3 of the audience is against more federal regulations. Thank you very much for that.

Water quality for forestry in the Commonwealth of Virginia is regulated by voluntary best management practices, developed and implemented by the Virginia Department of Forestry. This is a system that is working very well, you know the old saying: if it ain't broke, don't fix it. We do not need a new layer of federal regulation by unelected bureaucrat with the EPA, in Washington, DC. Let's remember, last week, the EPA came up with the idea that they are going to regulate carbon dioxide as a pollutant. How many people have heard of Climategate? There is a scandal in the scientific community where the pro regulation people have purposely kept away science from global warming skeptics. The Environmental Protection Agency – insult to injury – in the heat of all this, said now is the time that we want to regulate Carbon Dioxide. What does that mean? The EPA is estimating that about 18 percent of methane comes from your livestock - your cattle, your horses, your poultry, and other livestock. EPA has expensive PHDs and lab coats – which you are paying the salaries of - they are going out there measuring the flatulence of the cattle.

In short, experts in the forestry community have looked at this TMDL and they have concluded that federal permits would be required for each of the following forestry activities, which are very customary to the Commonwealth of Virginia. Federal permits can be required for tree planting, prescribed burns, herbicide and fertilizer, road building and road maintenance. Like most land owners, I am land rich, and cash poor. When times are good, I get contacted about once a month by a realtor or developer wanting to buy my land. I have resisted it because I want to keep the trees, but we are in a very precarious point right now, where forestry and agriculture are increasingly not profitable. Taxation and regulations are

part of a big part of this. Wouldn't be ironic if a regulation to protect the environment forces a landowner to sell their land to developers? This is something for you to think about, there are perverse sanctions to what you do and no good deed goes unpunished. Thank you very much.